CLIMAX MOLYBDENUM COMPANY
AMAX MOLYBDENUM DIVISION
FORT MADISON PLANT
P.O. BOX 220 · FORT MADISON, IOWA 52627 · (319) 463-7151
TWX 510-331-7142
A DIVISION OF AMAX INC.

March 9, 1981

Rod Vlieger
Iowa Department of Environmental Quality
Henry A. Wallace Building
Des Moines, Iowa 50316

Re: February 19, 1981 AMAX Meeting.

Dear Mr. Vlieger:

This letter serves to confirm the contents of the discussions and substance of the agreements we reached in our meeting of February 19, 1981. As you will recall, the main subject of that meeting was the testing, analysis and reporting requirements of the DEQ relative to the various feed materials that AMAX will be using at their new plant addition.

Two major questions that needed to be resolved were: (1) definition of testing required on APT residue when new feedstocks are to be utilized in the plant, and (2) clarification of post start-up testing and sampling as specified in the original solid waste permit.

The DEQ was represented at the meeting by you, Bruce Henning and Barb Cook. John Butterfield and Ron Kraft appeared on behalf of the Iowa Development Comission. Joe Madera, Tom Kearns, Tom Anderson, Gary Van Riper represented AMAX. Bob Galbraith was the representative from the law firm Davis, Hockenberg, Wine, Brown and Koehn.

Tom Kearns began the meeting with a general discussion of the history of the new plant addition and its solid waste disposal site. During that discussion, Tom indicated that it had originally been thought that the feed material from AMAX's Canadian mine site would be the major feed material to the plant. Therefore, all analysis, testing and reporting was done with that in mind. However, it now appears that various feed materials will have to be used at the plant. This is necessitated in part by a labor strike at the Canadian mine and the nature of the worldwide supply of such feed materials.

I indicated that the basic type of feed material, tungsten scheelites, would not vary. However, the grade of the feed material and the type and quantity of various other elements in the feed material could vary depending upon the source for that material. These variances could even include variances within the feed material supplied by the Canadian mine site.

We then indicated it was AMAX's proposal that each time a new feed material is to be used at the plant such material would be screened by using an EP Toxicity test and a radio-chemical test. In addition, these same analyses would be made periodically on the waste residue generated from the plant. The specific questions were then posed as to whether this was sufficient for DEQ purposes and what type of reporting of these tests would be required by the DEQ.

It was agreed to by the DEQ that the EP Toxicity test would be an adequate screening mechanism to be used on the APT residue of potential feedstock material. Bench simulation of the digestion step and the resultant residue generated would be a suitable sample for the EP Toxicity test. Notification will be made to the Iowa DEQ with the appropriate EP Toxicity results when a new feedstock is anticipated. Furthermore, it was agreed that blending of feed materials was acceptable if the resulting residue was non-hazardous according to the EP Toxicity test. If this blending is undertaken primarily to produce a non-hazardous waste, the residue from the blended feed materials would be tested via the EP Toxicity test and notification and results submitted to the Iowa DEQ.

The second major question was the post start-up testing requirement, particularly the six-month, 25-element sampling program. Rod Vlieger, of the Iowa DEQ, indicated that the 25 elements were not necessarily included because of their toxicity but because they were good indicators of potential groundwater contamination.

It was agreed that AMAX would conduct the 6-month test for the 25 elements as specified in the existing permit. The test would be conducted on whatever materials and residue are being processed at the plant at the time the permit requires testing. Based upon these results, DEQ may request similar residue tests periodically.

Should your recollection of the agreements differ from those set forth in this letter or should you feel that any subject be amplified on or added to the documentation of our discussions and agreements, please do not hesitate to contact me.

Yours very truly,

Thomas E. Anderson

Thomas E. Anderson, P.E.
Environmental Control Engineer

TEA/mjs
cc: Bruce Henning
Barb Cook
John Butterfield
Gary Van Riper
Ron Kraft
Joe Madera
T. Kearns